

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY


(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

RECD 23 JUN 2005

WIPO

PCT

Applicant's or agent's file reference 158153 CL-KR		<b>FOR FURTHER ACTION</b>		See Form PCT/IPEA/416
International application No. PCT/NO2004/000217		International filing date (day/month/year) 15.07.2004		Priority date (day/month/year) 15.07.2003
International Patent Classification (IPC) or national classification and IPC B68G11/04				
Applicant WONDERLAND AS et al.				
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> sent to the applicant and to the International Bureau) a total of 2 sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>				
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input checked="" type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input checked="" type="checkbox"/> Box No. VIII Certain observations on the international application</p>				
Date of submission of the demand  13.05.2005		Date of completion of this report  21.06.2005		
Name and mailing address of the international preliminary examining authority:   European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized Officer  Dupuis, J-L  Telephone No. +49 89 2399-2908		



**INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY**

International application No.  
PCT/NO2004/000217

---

**Box No. I Basis of the report**

---

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
  - ☐ publication of the international application (under Rule 12.4)
  - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements\*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

**Description, Pages**

1-5 as originally filed

**Claims, Numbers**

1-10 received on 21.05.2005 with letter of 13.05.2005

**Drawings, Sheets**

1/4-4/4 as originally filed

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
  - ☐ the claims, Nos.
  - ☐ the drawings, sheets/figs
  - ☐ the sequence listing (*specify*):
  - ☐ any table(s) related to sequence listing (*specify*):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages
  - ☐ the claims, Nos.
  - ☐ the drawings, sheets/figs
  - ☐ the sequence listing (*specify*):
  - ☐ any table(s) related to sequence listing (*specify*):

\* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY**

International application No.  
PCT/NO2004/000217

---

**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

---

1. Statement

Novelty (N)	Yes: Claims	1-10
	No: Claims	
Inventive step (IS)	Yes: Claims	1-10
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-10
	No: Claims	

2. Citations and explanations (Rule 70.7):

**see separate sheet**

---

**Box No. VII Certain defects in the international application**

---

The following defects in the form or contents of the international application have been noted:

**see separate sheet**

---

**Box No. VIII Certain observations on the international application**

---

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

**see separate sheet**

**INTERNATIONAL PRELIMINARY  
REPORT ON PATENTABILITY  
(SEPARATE SHEET)**

International application No.

PCT/NO2004/000217

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement**

Reference is made to the following documents:

D1: US-A-3 099 021 (WETZLER JUSTIN J) 30 July 1963 (1963-07-30)

D2: AT 316 983 B (SCHAUMSTOFFVERARBEITUNGS U VER) 12 August 1974  
(1974-08-12)

The document D1 is regarded as being the closest prior art to the subject-matter of claim 1, and shows a process for manufacturing a mattress according to the preamble of claim 1.

The subject-matter of claim 1 differs from this known process in that a liquide jointing substance of the same material as the pieces named in the preamble of claim 1 is used to join the pieces, by applying the liquide jointing substance in the contact area between the pieces only.

The subject-matter of claim 1 is therefore new (Article 33(2) PCT).

The problem to be solved by the present invention may be regarded as to obtain a mattress from pieces by gluing only.

The additional features of claim 1 solve that problem, and no hint is given to the man skilled in the art, starting from D1 or D2 to arrive at the subject-matter of claim 1, since D1 and D2 discloses springs in contrast to the present application.

Therefore the subject-matter of claim 1 is considered also to be founded on an inventive step.

Claims 2-10 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.

**INTERNATIONAL PRELIMINARY  
REPORT ON PATENTABILITY  
(SEPARATE SHEET)**

International application No.

PCT/NO2004/000217

---

**Re Item VII**

**Certain defects in the international application**

Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents D1 and D2 is not mentioned in the description, nor are these documents identified therein.

**Re Item VIII**

**Certain observations on the international application**

The numbering of claim 4 is incorrect

## Claims

(Amended May 13, 2005)

1. A process for the manufacturing of a mattress comprising a bottom piece (1), longitudinal pieces (3),  
5 cross pieces (4) a top piece (6), and a core,  
**characterised in that** a liquid jointing substance (1,5) of the same material as the named pieces (1,3,4,6) is used to join the pieces, by applying the liquid jointing substance in the contact area between the pieces only.
- 10 2. A process according to claim 1,  
**characterised in that** the pieces (1,3,4,6) comprise a foam material which may be brought into a liquid state and subsequently hardened.
3. A process according to claim 2,  
15 **characterised in that** the foam material is polyurethane.
2. A process according to any of the claims 1 to 3,  
**characterised in that** it comprises the following steps, wherein:
- (I) the bottom piece (1) is laid out;
- 20 (II) a moulding substance (2) is applied to the longitudinal edges (3) and cross edges (4) on one surface side of the bottom piece (1);
- (III) the longitudinal pieces (3) and cross pieces (4)  
25 are lowered into the moulding substance (2) and hardened;
- (IV) the moulding substance (5) is applied on the same surface side of the bottom piece (1) between the longitudinal pieces (3) and cross pieces (4);

(V) a core (5) is lowered into the moulding substance (5) and hardened; and

(VI) a top piece (7) is provided with moulding substance (5) and turned with the moulding substance (5) facing the named upright longitudinal pieces (3) and cross pieces (4) and lowered onto the same and hardened.

5. A process according to claim 4, **characterised in that** in step II, the moulding substance (2) is applied to the under edges of the longitudinal pieces (3) and cross pieces (4) simultaneously or in any order successively.

6. A process according to claim 4, **characterised in that** in step IV, the moulding substance (2) is applied to the under side of the core (6).

7. A process according to any of the claims 4-6, **characterised in that** the steps II and IV are performed simultaneously or in any order successively.

8. A process according to any of the claims 4-7, **characterised in that** the steps III and V are performed simultaneously or in any order successively.

9. A process according to any of the claims 4-8, **characterised in that** it further comprises a step wherein:

(VII) the moulding substance is injected into the corner joints between the longitudinal pieces (3) and cross pieces (4).

10. A process according to any of the claims 4-9, **characterised in that** one of more steps are automated, such as by a robot.